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Ebarb et al.

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- (54) **LOCKABLE AND ADJUSTABLE FRICTION GAME CALL APPARATUS AND METHODS**
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(52) **U.S. Cl.**
CPC **A01M 31/004** (2013.01)

(58) **Field of Classification Search**
CPC A63H 5/00; A01M 31/004
USPC 446/397, 418, 422
See application file for complete search history.

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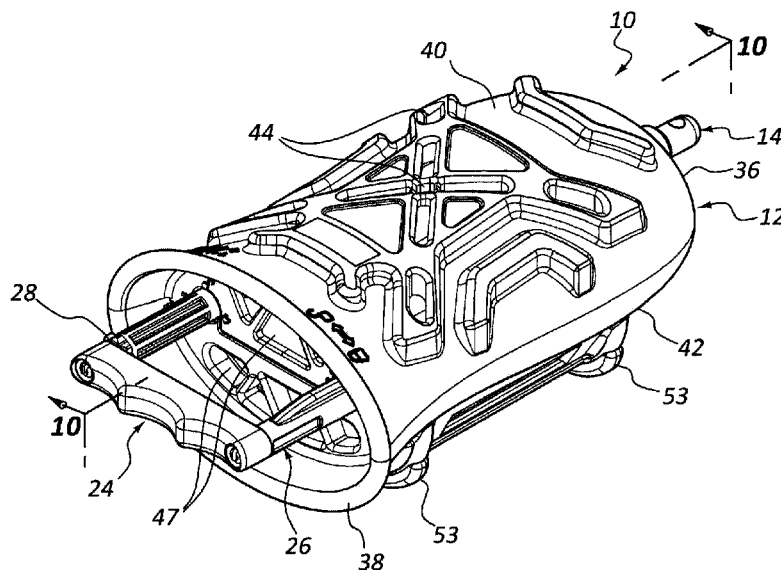
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(57) **ABSTRACT**

A game call that includes a push rod, a friction plate, a striker, first and second biasing members, and a locking sleeve. The push rod includes distal and proximal end portions. The friction plate is mounted to the push rod. The first biasing member is configured to bias the push rod in a proximal direction. The second biasing member is configured to rotate the friction plate into contact with the striker. The locking sleeve is connected to the push rod and configured to fix an axial position of the friction plate relative to the striker.

14 Claims, 11 Drawing Sheets



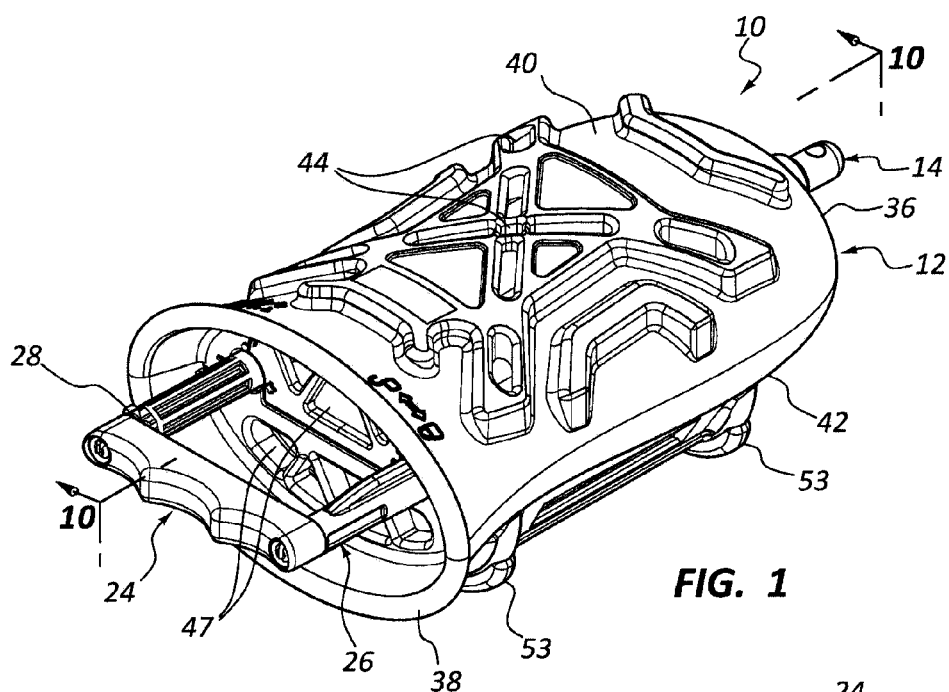


FIG. 1

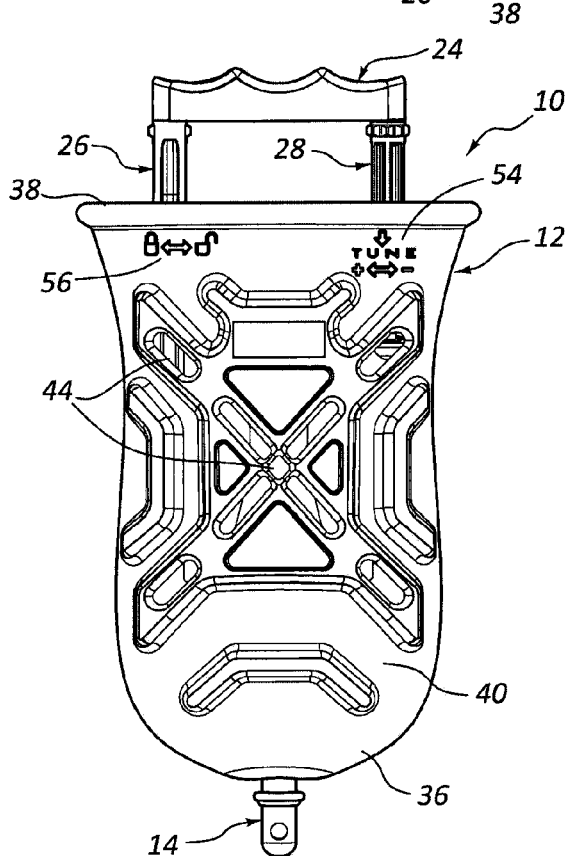


FIG. 2

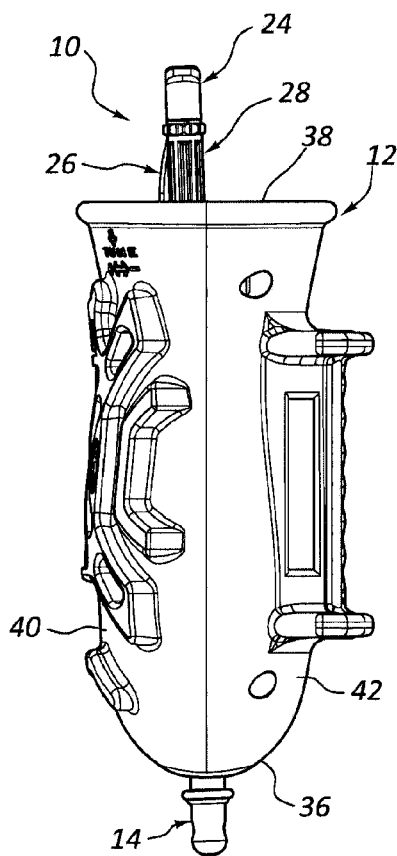


FIG. 3

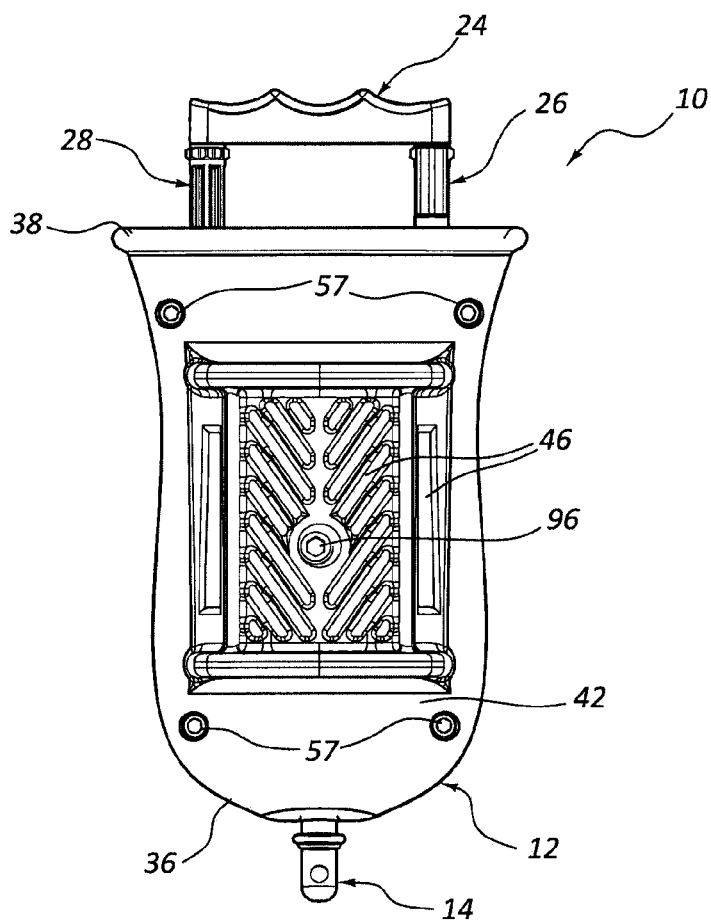


FIG. 4

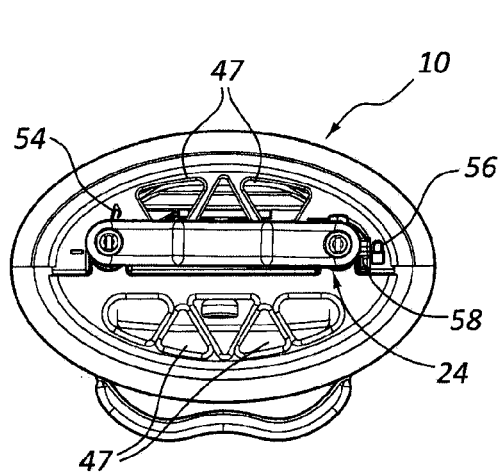


FIG. 5A

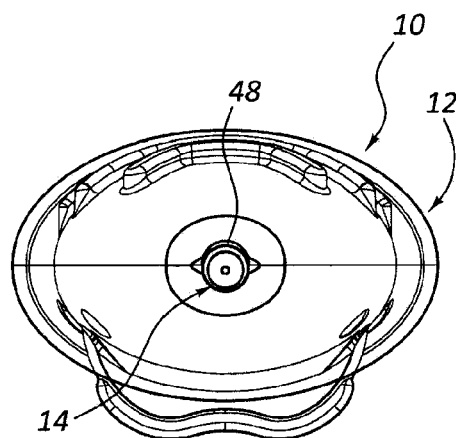


FIG. 5B

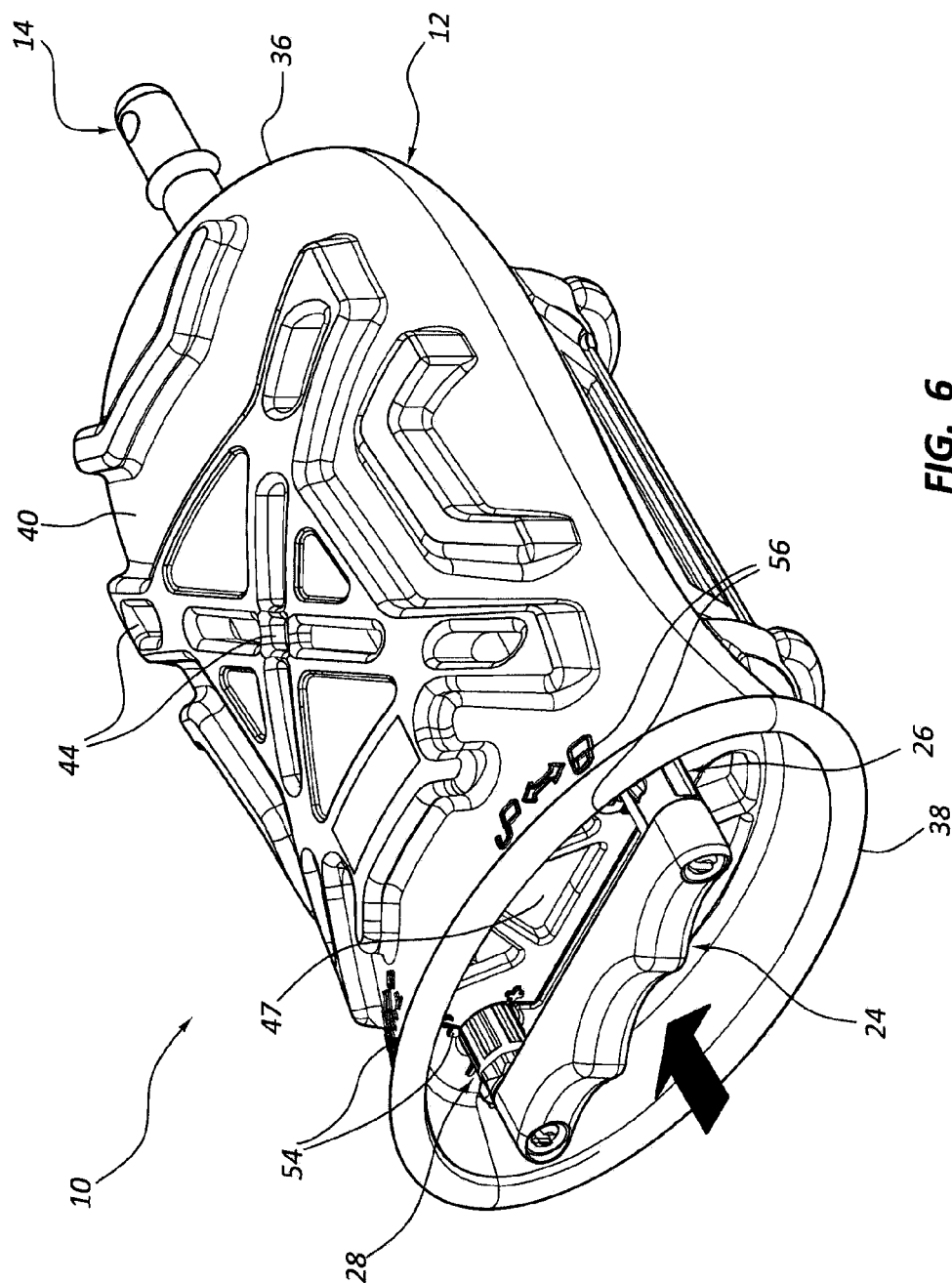
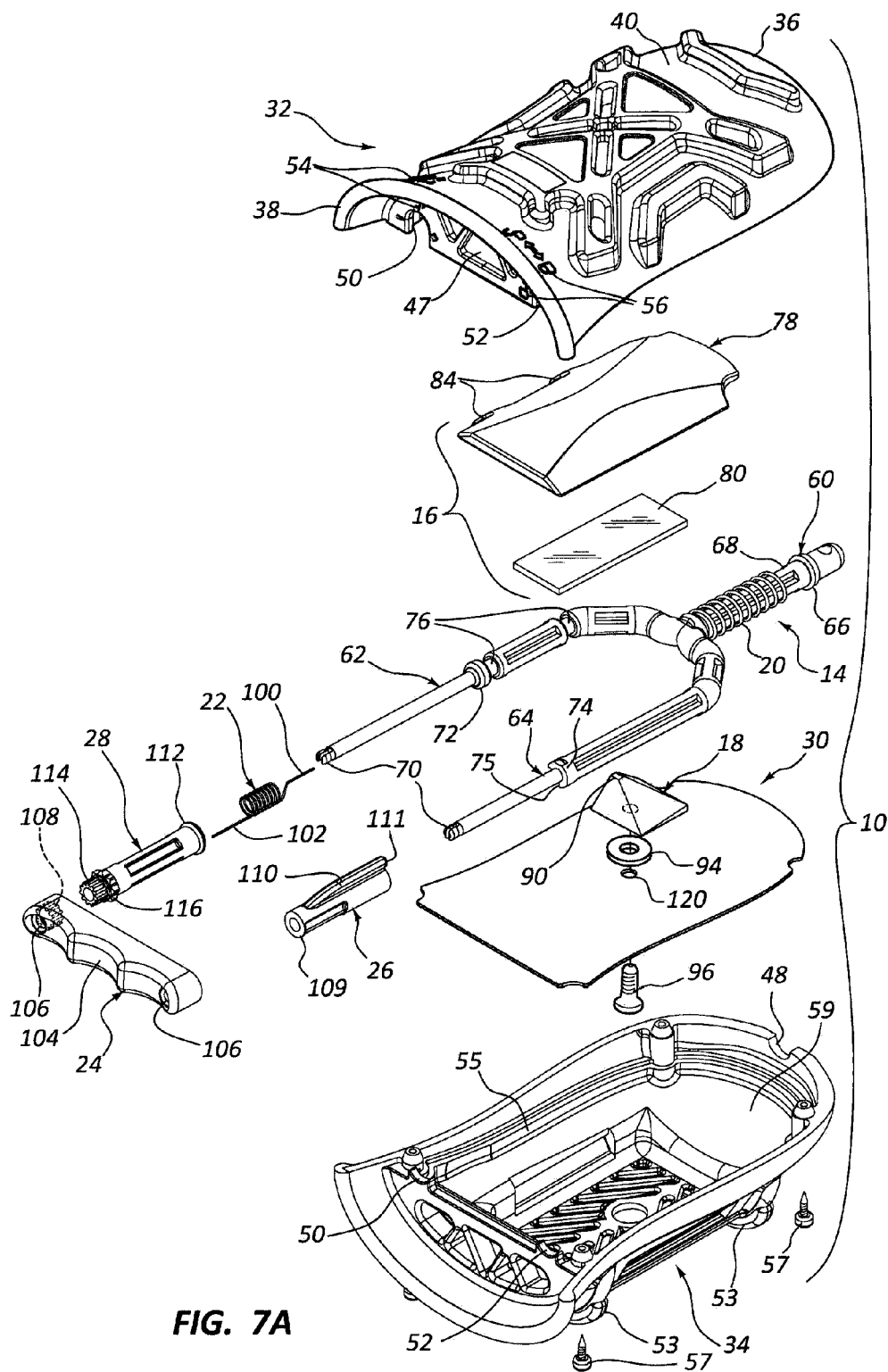


FIG. 6



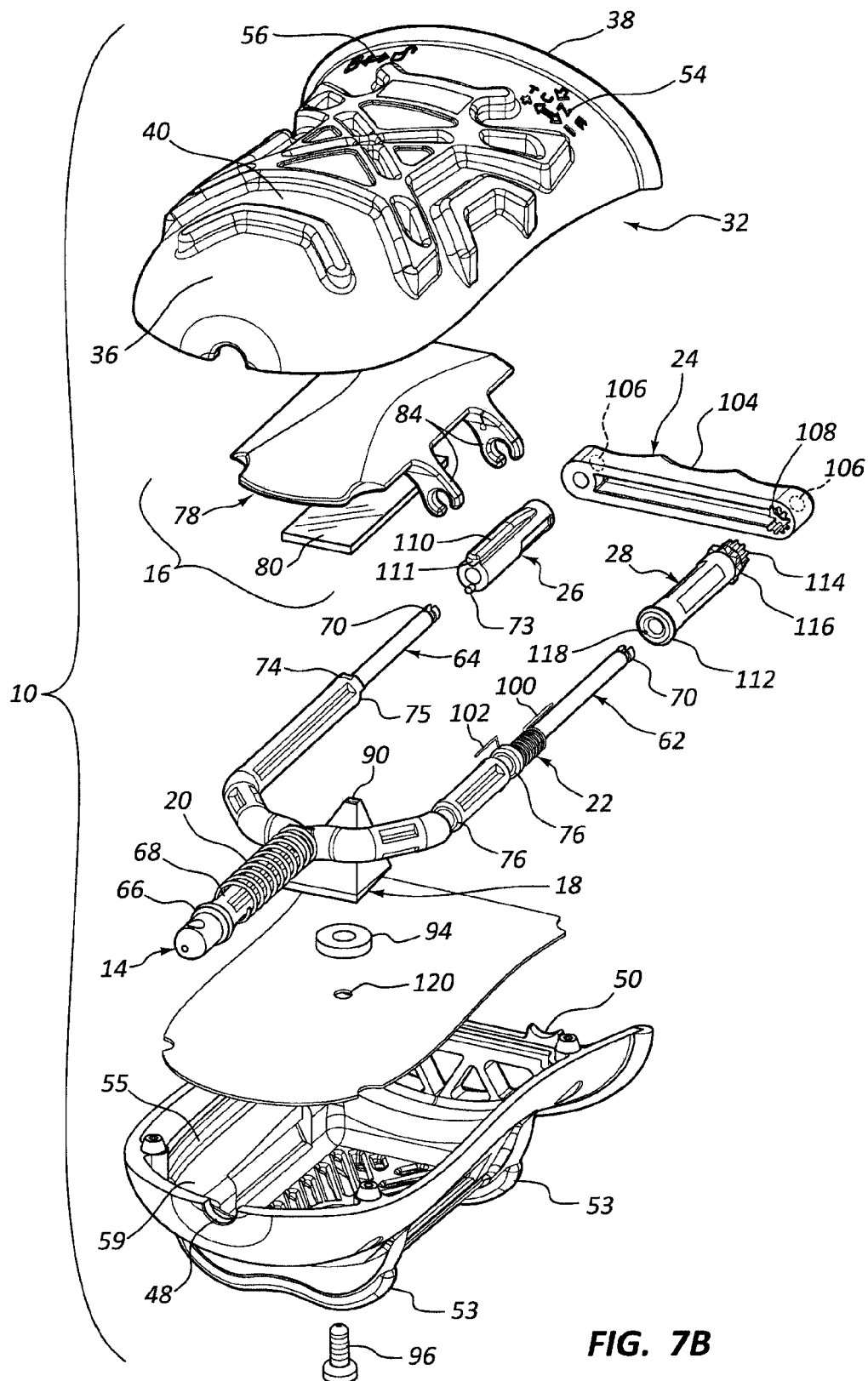


FIG. 7B

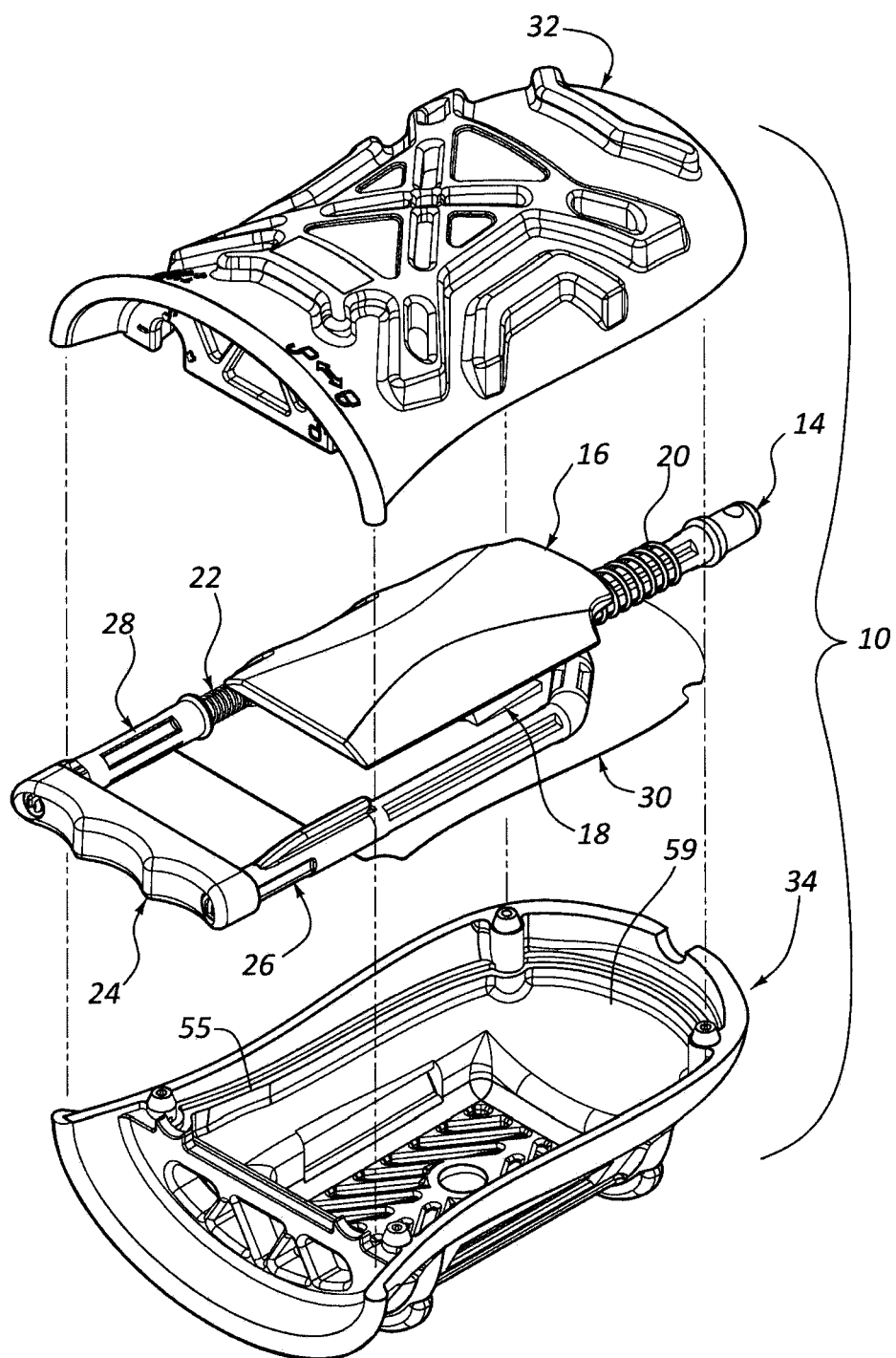


FIG. 8

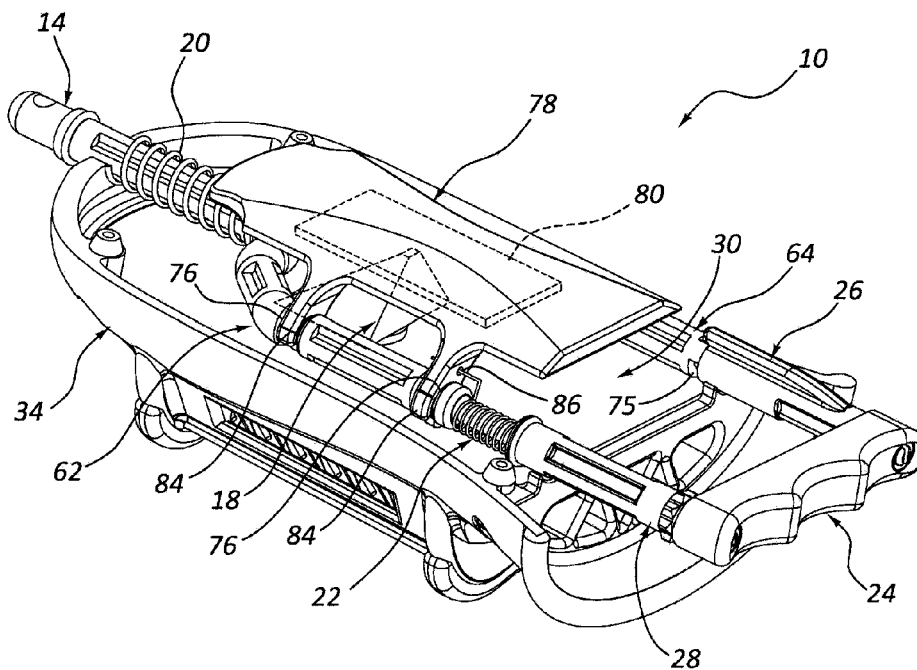


FIG. 9

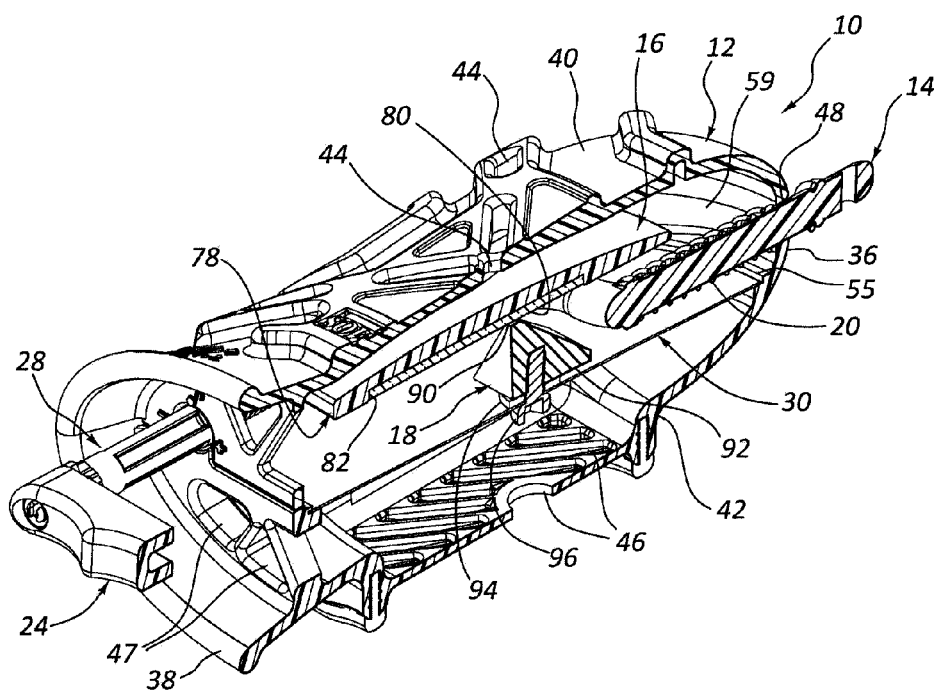


FIG. 10

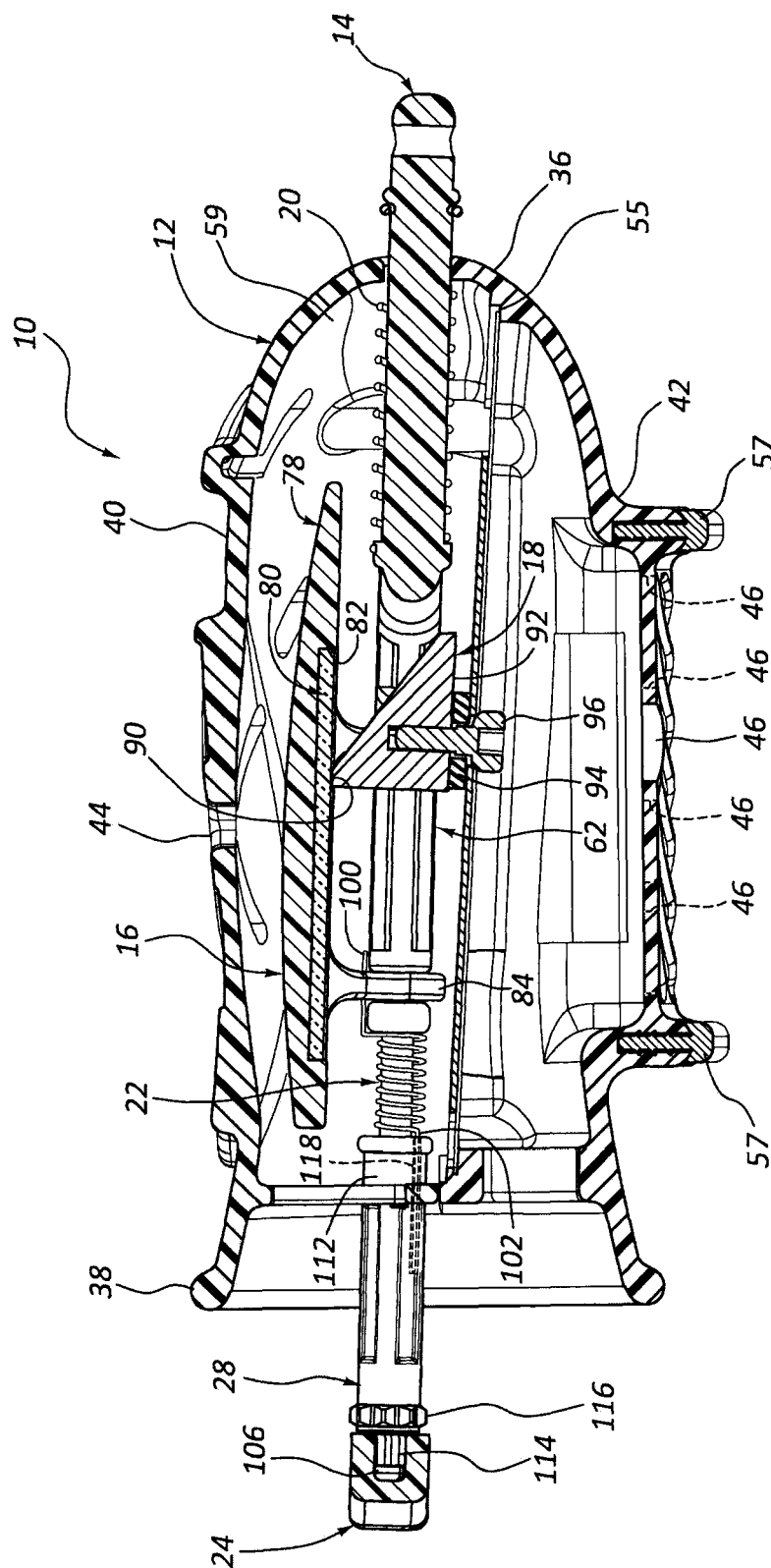


FIG. 11A

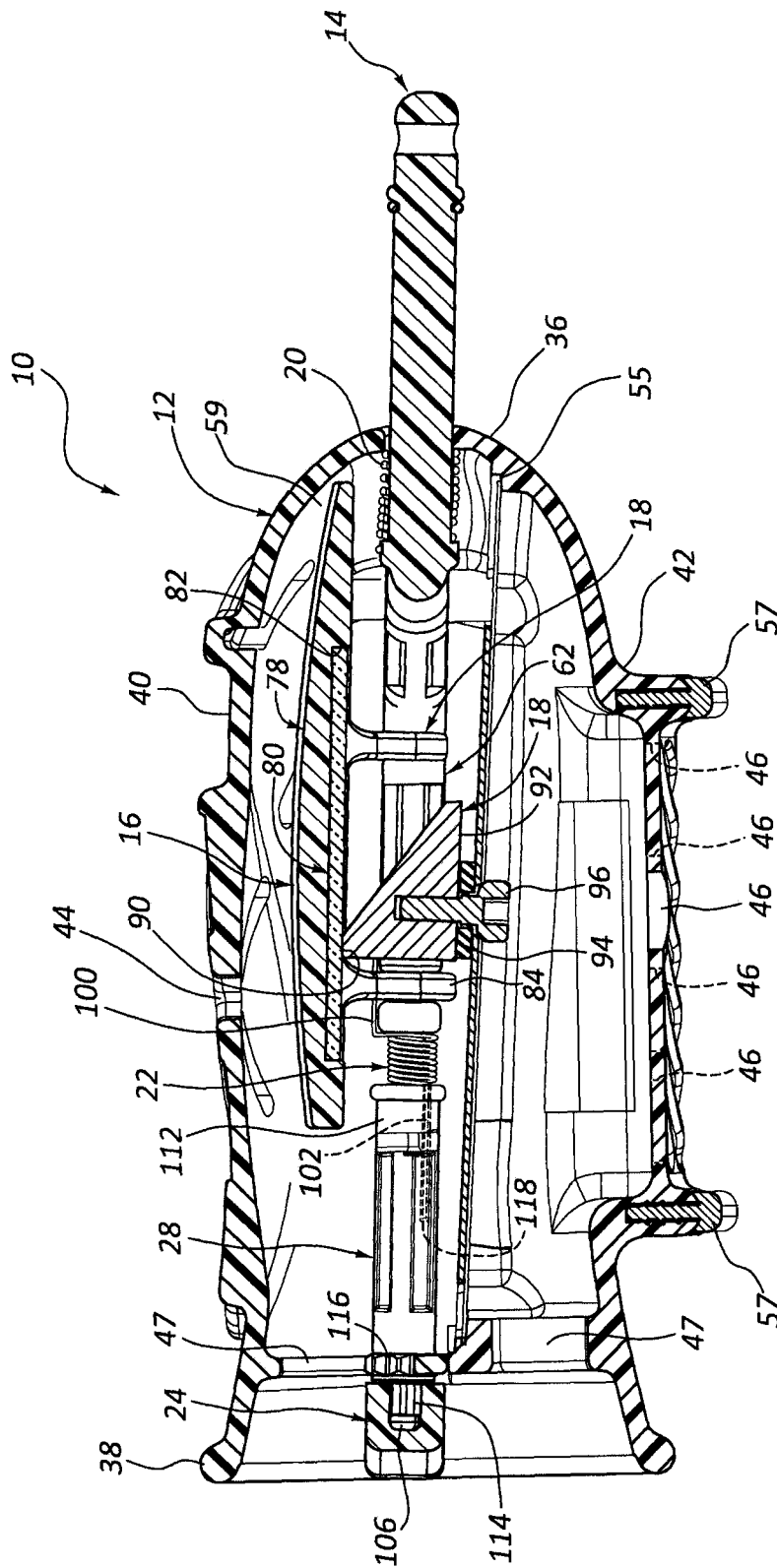


FIG. 11B

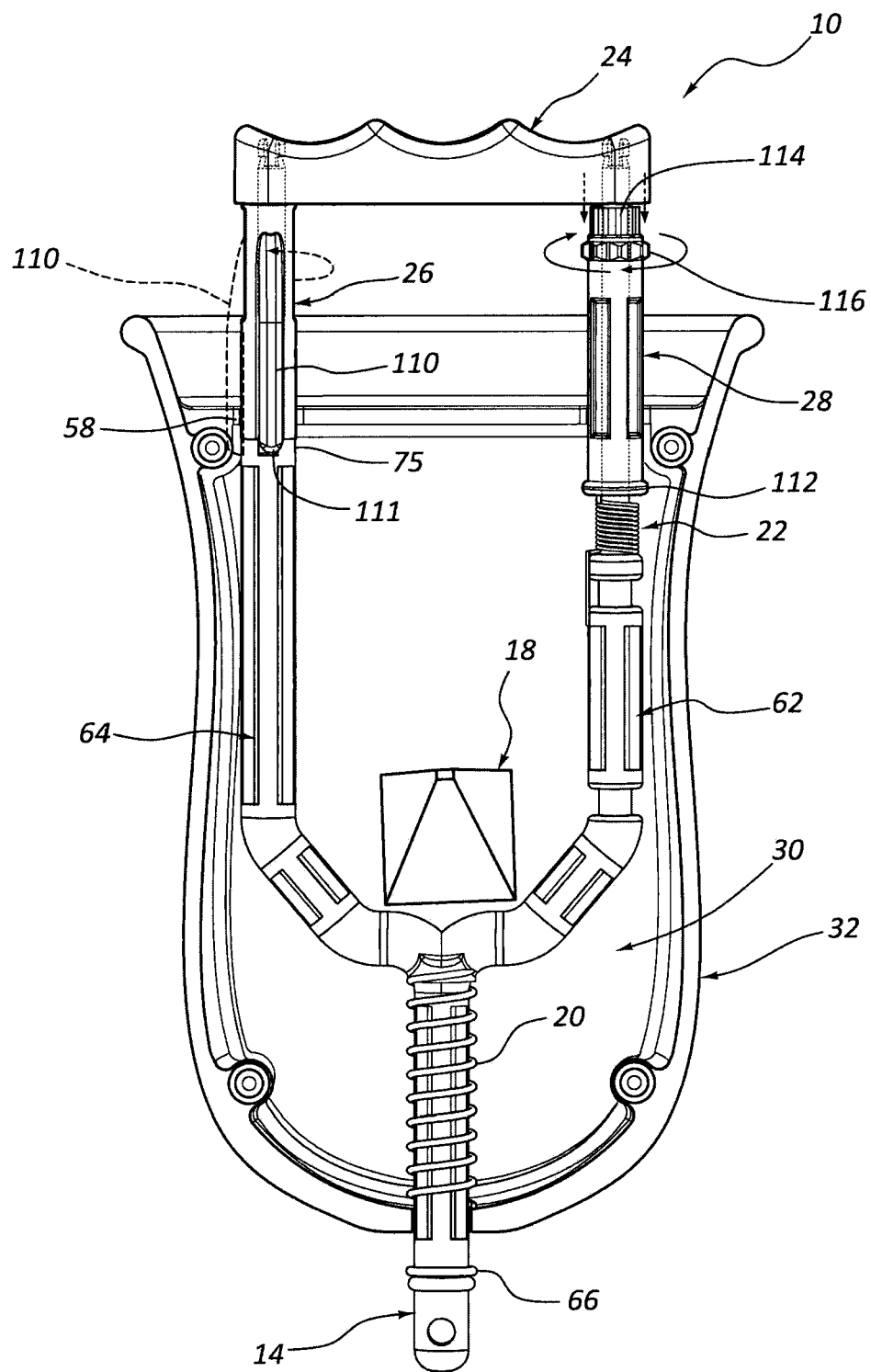


FIG. 12A

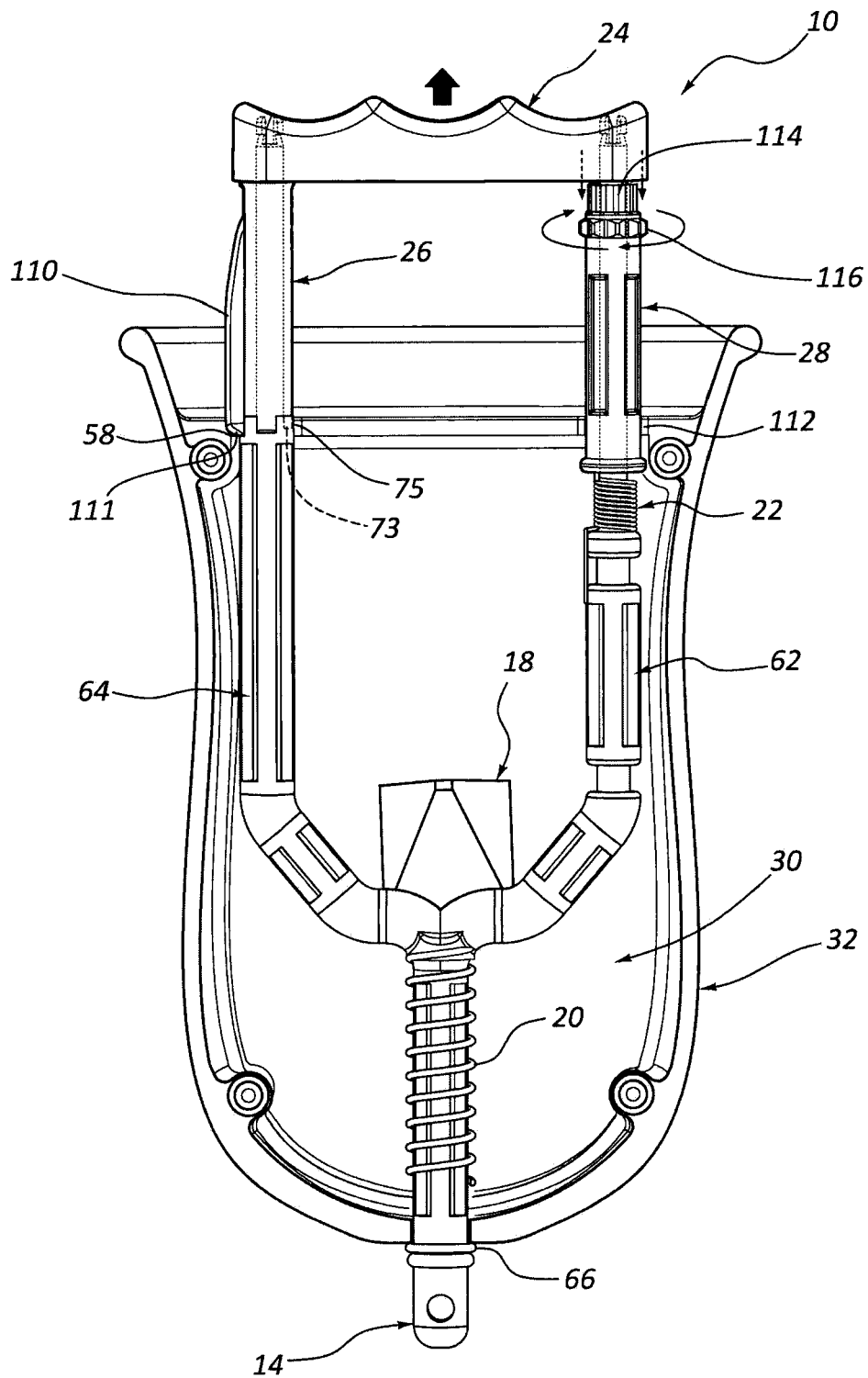


FIG. 12B

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**LOCKABLE AND ADJUSTABLE FRICTION
GAME CALL APPARATUS AND METHODS****BACKGROUND**

Many types of game calls have been developed over the years for a variety of purposes. Game calls have primarily been developed for simulating the sounds of wild animals. Among others, game calls have been developed to simulate the sounds of big game animals, such as elk and deer, as well as birds and small game.

Turkey calls, in particular, have been the subject of significant research and development efforts over the years. A variety of different types of turkey calls have been developed. Friction calls may broadly be described as one category of game calls used for producing wild turkey sounds. Within the broad category of friction calls is the narrower category that involves a flat calling surface (e.g., a flat piece of slate, glass, crystal, aluminum, or any other suitable material often referred to as a friction plate) and a striker for contacting the calling surface to produce sounds of wild animals. The flat calling surface is commonly disc-shaped, but those skilled in the art will understand that a calling surface may be of any shape or size. To create appropriate sounds with this type of friction call, the calling surface is typically conditioned or treated (using sand paper, an emery cloth, a Brillo pad, a stone, or some other abrasive material) to increase the friction resulting from contact between the calling surface and the striker. The striker may be made out of a number of different materials, such as wood, metal, plastic, or any other suitable material as understood by those skilled in the art.

Most traditional friction calls have been hand-held calls. In using these traditional friction calls, two hands are often used: one hand to hold the portion of the call that includes the calling surface; another hand to hold the striker. For obvious reasons, using both hands for friction calls has disadvantages. If two hands are used to operate the game call, the person using the call may not have a firearm or bow in a "ready" position for shooting when operating the game call. Turkeys, for example, have phenomenal eyesight, and may catch even the smallest of movements when they are within shooting range. The more movement when calling turkeys, the more likely a turkey will see the person doing the calling. The actions of putting down the game call and picking up a bow or firearm require movement which may result in a lost opportunity to harvest the game animal.

Still another problem with traditional friction calls relates to inadvertent operation when transporting or storing the game call. Even the slightest relative movement between the striker and the friction member typically generates sounds. These sounds, when generated at inopportune times, may alert the game to the hunter's presence.

In view of the foregoing, opportunities exist for improvements in construction, storability, and operation of friction type game calls.

SUMMARY

One aspect of the present disclosure relates to a game call that includes a push rod, a friction plate, a striker, first and second biasing members, and a locking sleeve. The push rod includes distal and proximal end portions. The friction plate is mounted to the push rod. The first biasing member is configured to bias the push rod in a proximal direction. The second biasing member is configured to rotate the friction plate into contact with the striker. The locking sleeve is

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connected to the push rod and configured to fix an axial position of the friction plate relative to the striker.

Tension in the second biasing member may be adjustable to alter a rotational force applied to rotate the friction plate.

5 The push rod may include first and second legs, wherein the friction plate and second biasing member are mounted to the first leg, and the locking sleeve is mounted to the second leg. The first biasing member may be positioned at the distal end portion of the push rod, and the locking sleeve may be positioned at the proximal end portion of the push rod.

10 The game call may further include a tone board, with the striker being mounted to the tone board. The game call may include a housing, the striker may be fixed relative to the housing, with the push rod and friction plate being movable relative to the housing. The locking sleeve may rotate between a locked position and an unlocked position. The game call may include a tone adjustment member connected to the second biasing member and rotatable to adjust tension in the second biasing member.

15 Another aspect of the present disclosure is directed to a game call that includes a striker, a friction plate, and a locking member. The friction plate is configured to contact the striker to generate sound, wherein the striker and friction plate are rotatably biased into contact with each other. The locking member is operable to fix a position of the striker relative to the friction plate in at least one direction of motion to limit creation of sound.

20 The game call may include a tone adjustment member operable to adjust a rotational bias force applied between the striker and the friction plate. The game call may include a push rod, wherein the friction plate is connected to the push rod and the push rod is axially movable to move the friction plate relative to the striker. The locking member may be mounted to the push rod. The game call may include a biasing member, a push rod, and a housing, wherein the biasing member is operable to bias the push rod into a first position relative to the housing. The striker may comprise wood and the friction plate may comprise glass. The game call may include a tone board and the striker may be connected to the tone board.

25 A further aspect of the present disclosure relates to a method of operating a game call. The method includes providing a housing, a push rod, a friction plate, a striker, and a locking member, wherein at least one of the friction plate and striker is connected to the push rod. The method may include moving the push rod axially relative to the housing to move the friction plate and striker into sliding contact with each other to generate sound, and operating the locking member to fix a position of the push rod relative to the housing to fix a position of the striker relative to the housing to limit generation of sound.

30 The striker may be mounted to the housing and the friction plate may be mounted to the push rod, wherein the friction plate is movable relative to the striker. The game call may further include a biasing member configured to rotate the friction plate relative to the push rod and into contact with the striker. The push rod may include first and second legs. The friction plate may be mounted to the first leg and the locking member may be mounted to the second leg. The method may include biasing the push rod in a first direction and moving the push rod axially in a second direction, which is opposite to the first direction, to move the friction plate and striker into sliding contact with each other to generate sound.

35 Features from any of the above-mentioned embodiments may be used in combination with one another in accordance with the general principles described herein. These and other

embodiments, features, and advantages will be more fully understood upon reading the following detailed description in conjunction with the accompanying drawings and claims.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings illustrate a number of exemplary embodiments and are part of the specification. Together with the following description these drawings demonstrate and explain various principles of the instant disclosure.

FIG. 1 is a perspective view of an example game call in accordance with the present disclosure.

FIG. 2 is a top view of the game call of FIG. 1.

FIG. 3 is a side view of the game call of FIG. 1.

FIG. 4 is a bottom view of the game call of FIG. 1.

FIG. 5A is a rear view of the game call of FIG. 1.

FIG. 5B is a front view of the game call of FIG. 1.

FIG. 6 is a perspective view of the game call of FIG. 1 with a push rod advanced forward to operate the game call.

FIGS. 7A and 7B are exploded perspective views of the game call of FIG. 1.

FIG. 8 is a partial exploded perspective view of the game call of FIG. 1.

FIG. 9 is a perspective view of the game call of FIG. 1 with a top housing member removed.

FIG. 10 is a cross-sectional view of the game call of FIG. 1 taken along cross-section indicators 10-10.

FIG. 11A is a cross-sectional view of the game call of FIG. 1 with the push rod in a first position.

FIG. 11B is a cross-sectional view of the game call of FIG. 1 with the push rod in an advanced position.

FIG. 12A is a top view of the game call of FIG. 9 with the push rod in an unlocked position.

FIG. 12B is a top view of the game call of FIG. 9 with the push rod in a locked position.

DETAILED DESCRIPTION

Throughout the drawings, identical reference characters and descriptions indicate similar, but not necessarily identical, elements. While embodiments of the instant disclosure are susceptible to various modifications and alternative forms, specific embodiments have been shown by way of example in the drawings and will be described in detail herein. However, one of skill in the art will understand that embodiments of the instant disclosure are not intended to be limited to the particular forms disclosed herein. Rather, the instant disclosure covers all modifications, equivalents, and alternatives falling within the scope of embodiments defined by the appended claims.

One aspect of the present disclosure is directed to a game call that is operable to lock a position of the striker relative to the friction plate. The term “friction plate” will be used interchangeably throughout the following description to describe any type of friction member or calling surface such as a piece of slate, glass, wood, carbon, or other structure that generates sound when contacted by a striker. The striker may include materials such as, for example, wood, styrene, carbon or other suitable materials known to those skilled in the art. The game calls disclosed herein may be referred to as turkey game calls and may operate to generate sounds that mimic sounds created by live turkeys.

A further aspect of the present disclosure is directed to a game call wherein the striker and friction plate are biased into contact with each other, and the game call is operable to move the striker across a surface of the friction plate to

generate sound. The force (e.g. biasing force) that moves the friction plate and striker into contact with each other may be adjustable to tune the sound generated by the game call as the striker is moved across a surface of the friction plate.

Another aspect of the present disclosure relates to generating sound by rotating one of a striker and a friction plate about an axis into contact with the other of the striker and friction plate, and then moving the striker and friction plate relative to each other in a direction parallel with the axis while maintaining the contact.

An example game call includes a push rod having first and second legs. One of the legs of the push rod carries a locking member and another leg of the push rod carries a tone adjustment member. One of the friction plate or striker may be mounted to the push rod and the other of the striker and friction plate may be fixed within a housing. The push rod extends through the housing. Operating the push rod in a longitudinal or axial direction moves the striker across a friction surface of the friction plate to generate sound. The locking member operates to fix a position of the push rod relative to the housing, thereby fixing a position of the striker relative to the friction plate. Locking the striker relative to the friction plate may limit relative movement therebetween and thereby prevent unwanted sound when the game call is not intended to be operated. The tone adjustment member may adjust a biasing force that biases the friction plate and striker into contact with each other.

In one example, a friction plate is pivotally mounted to the push rod (e.g., one of the first and second legs of the push rod). A biasing member (e.g. spring) may apply a rotational bias force to the friction plate to rotate the friction plate into contact with the striker. The striker may be held in a fixed position within the housing of the game call. The striker may be mounted to a tone board. Operating the push rod in a longitudinal direction relative to the housing may move the friction plate, which is biased into contact with the striker, relative to the striker in a longitudinal direction to generate sound.

The game call may include a push rod biasing member that biases the push rod into a first or rest position. Operating the push rod axially in a forward direction against biasing forces of the push rod biasing member moves the friction plate across the striker into an advanced position to generate sound. The push rod biasing member biases the push rod from the advanced position back to the rest position upon releasing the force applied to advance the push rod. In one example, the push rod may be retracted from the rest position into a retracted position in which the locking member is operable into a locked position to fix an axial position of the push rod relative to the housing. In other arrangements, the locking member may be operable between locked and unlocked positions while the push rod is in the rest position rather than the retracted position.

The tone adjustment member may be rotatably mounted to a leg of the push rod. The tone adjustment member may be moved axially as well as rotationally relative to the push rod. The tone adjustment member may include an adjustment feature that maintains a rotated position of the tone adjustment member relative to the push rod to hold a given tension applied in a biasing member that biases the friction plate into contact with the striker. In one example, a handle is mounted to the push rod. The tone adjustment member may be fixed in a given rotated position relative to the handle to maintain a tension adjustment in the biasing member made by rotating the tone adjustment member.

Although the examples disclosed show the friction plate mounted to the push rod and the striker maintained in a fixed

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position relative to the housing, other arrangements are possible in which the friction plate and striker are switched in their orientation so that the striker is carried by the movable push rod and the friction plate is maintained in a fixed position relative to the housing. For example, a tone board may be pivotally mounted to a leg of the push rod and the striker is mounted to the tone board. The friction plate may be fixed within the housing such that advancing and retracting the push rod moves the striker relative to the fixed friction plate to generate sound.

The housing of the game call may include a plurality of openings that provide a pathway for sound to escape the internal cavity of the housing. The housing may include a plurality of gripping features that help the operator hold the housing. In at least one example, the game call may be configured for a single hand operation. For example, the operator may hold the housing between a thumb and fingers of one hand, and use other fingers of the same hand to operate the push rod axially relative to the housing to generate sound. The housing may include legs or other support features that orient the game call in a position parallel to a support surface upon which the game call rests.

Referring now to FIGS. 1-12B, and in particular FIGS. 1, 7A-B, 9 and 10, a game call 10 includes a housing 12, a push rod 14, a friction plate 16, and a striker 18. The game call 10 also includes first and second biasing members 20, 22, a handle 24, a locking sleeve 26, a tone adjustment member 28, and a tone board 30. The push rod 14 moves axially within the housing 12. The friction plate 16 is mounted to the push rod 14. The striker 18 is mounted to the tone board 30 and maintained in a fixed position within the housing 12. The push rod 14 moves axially against biasing forces of the first biasing member 20. The second biasing member 22 applies a rotational bias force to the friction plate 16 to rotate the friction plate 16 into contact with the striker 18. The handle 24 is mounted at a proximal end of the push rod 14 and provides an engagement surface for the operator to move the push rod 14 relative to housing 12. The locking sleeve 26 operates to lock an axially position of the push rod 14 relative to the housing 12. The tone adjustment member 28 is operable to adjust tension in the second biasing member 22 thereby adjusting the rotational bias force applied by the second biasing member 22 to the friction plate 16.

The housing 12 is shown in FIGS. 1 and 7A-B including top and bottom housing members 32, 34, front and rear ends 36, 38, top and bottom surfaces 40, 42, top and bottom openings 44, 46, rear openings 47, a front rod opening 48, and first and second rear rod openings 50, 52. Housing 12 also includes support members 53 along the bottom surface 42, adjustment indicia 54, a support surface 55, locking indicia 56, housing fasteners 57, a lock recess 58, and an interior 59.

The top and bottom housing members 32, 34 may be secured together with the housing fasteners 57. The top and bottom openings 44, 46 and rear openings 47 may provide openings through which sound generated within the interior 59 is able to travel out of the housing 12. Additional openings may be positioned at other locations on housing 12 such as, for example, along either of the side surfaces or the front end 36. The top, bottom and rear openings 44, 46, 47 may have any desired shape and size. The front rod opening 48 may be sized for a portion of the push rod 14 to extend therethrough. The first and second rod openings 50, 52 may be sized for different portions of the push rod 14 and other features, such as the locking sleeve 26 and tone adjustment member 28 to travel into and out of the housing 12.

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The adjustment indicia 54 and locking indicia 56 may be positioned at various locations on housing 12 that are visible to the operator during operation of the game call 10. The adjustment indicia 54 may include arrows that show the operator what direction to move the tone adjustment member 28 to increase the biasing force applied by second biasing member 22 to the friction plate 16. FIG. 2 shows the adjustment indicia 54 positioned on the top housing member 32 aligned with the first rod opening 50. The adjustment indicia 54 may also include an arrow pointing in an axially direction that instructs the operator to move the tone adjustment member 28 in an axially direction relative to handle 24 to permit rotation of the tone adjustment member 28. The adjustment indicia 54 may include an arrow pointing in a lateral direction with plus and minus signs, which instruct the operator to rotate the tone adjustment member 28 to increase or decrease the tension in the second biasing member 22. The adjustment indicia 54 may include the term "tune" or other term or symbol that informs the operator that the tone adjustment member 28 adjusts sound generated by the game call 10. Other terms, arrows, or different indicia may be used to provide visual instructions for the operator.

The adjustment indicia 54 may be positioned at other locations on housing 12 such as, for example, directly adjacent to the first rod opening 50 at the rear end 38 as shown in FIGS. 5A and 7A-B. The adjustment indicia 54 at this location may include a note symbol that indicates to the operator that adjustment of the tone adjustment member 28 adjusts a sound generated by the game call 10, and may include a rotation arrow.

The locking indicia 56 may be included on the top housing member 32 along the top surface 40 (see FIG. 2). A separate set of locking indicia 56 may be positioned at the rear end 38 adjacent to the second rod opening 52 (see FIGS. 5A and 7A-B). The locking indicia 56 may include a padlock symbol in a locked orientation and in an unlocked orientation. The locking indicia 56 may include an arrow arranged in a lateral direction that provides instruction for the operator to rotate the locking sleeve 26 to move between locked and unlocked positions. Other symbols and orientations may be used for the locking indicia 56 in other arrangements.

The lock recess 58 may be provided in the housing 12 at a location adjacent to the second rod opening 52. The lock recess 58 may receive a portion of locking sleeve 26 when the locking sleeve 26 is in a locked position. The lock recess 58 may hold the locking sleeve 26 in a desired rotated position until the locking sleeve 26 is intentionally rotated by an operator.

The support surface 55 shown in FIGS. 7A-B is sized and configured to receive and support the tone board 30 (see FIGS. 9-11A). In at least one example, the support surface 55 has a shape that matches an outer profile of the tone board 30.

The support members 53 may be arranged and configured to support the housing 12 on a support surface. In one example, the support surface is a horizontal surface and the support members 53 hold the game call 10 in a horizontal position relative to the support surface.

The push rod 14 is described in further detail with reference to FIGS. 7A-B and 8. The push rod 14 includes a support portion 60 and first and second legs 62, 64 that extend from the support portion 60. The support portion 60 extends through the front rod opening 48 in the housing 12. The support portion 60 includes a forward stop surface 66 and a spring retention portion 68. The forward stop surface 66 may include a dampening member such as, for example, a rubber O-ring. The forward stop surface 66 may act as a

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stop surface when the push rod **14** is retracted and held in a locked position as shown in FIG. **12B**. The spring retention portion **68** may be sized and configured to retain the first biasing member **20** relative to the housing **12** as shown, for example, in FIGS. **9-11B**.

The first and second legs **62**, **64** each include a handle attachment feature **70** and one of the first and second stop surfaces **72**, **74**, respectively. The first stop surface **72** provides a backstop for the second biasing member **22** as shown in FIGS. **9-12B**. The second stop surface **74** may provide a stop surface to restrict axial movement of the locking sleeve **26** (see FIG. **8**). A track **75** may be formed in the second leg **64** adjacent to the second stop surface **74** as shown in FIG. **9**. The track **75** may receive a follower pin **73** or other feature extending from the locking sleeve **26** to limit rotational movement of the locking sleeve **26** relative to the second leg **64** (see FIGS. **7A-B**).

The first leg **62** may further include at least one friction plate mounting recess **76**. The friction plate mounting recess **76** receives mounting features of the friction plate **16** for pivotal mounting of the friction plate **16** relative to the push rod **14**. The friction plate mounting recess **76** may restrict axially movement of the friction plate **16** relative to push rod **14**.

The friction plate **16** is shown in FIGS. **7-11B** including a carrier member **78** and a friction member **80**. The carrier member **78** includes a recess **82** sized to receive and retain the friction member **80**. The carrier member **78** also includes at least one connection arm **84** for mounting the friction plate **16** to the push rod **14**. The carrier member **78** may include a first bias member attachment aperture **86** that receives a portion of the second biasing member **22**, wherein the second biasing member **22** transfers a rotational force to the friction plate **16**. The connection arm **84** is mounted to the friction plate mounting recess **76** of the first leg **62** of the push rod **14** as shown in FIG. **9**.

The friction member **80** may comprise any desired material and have any shape, size, or surface features desired to provide generation of sound when interacting with the striker **18**. In one example, the friction member **80** comprises a glass material. In other arrangements, the friction member **80** may comprise other materials such as, for example, slate, wood, carbon or other material having high friction properties.

The striker **18** may include an assembly of features including, for example, a striking surface **90**, a mounting surface **92**, a spacer **94**, and a fastener **96**. The striking surface **90** may be arranged to contact the friction member **80** of the friction plate **16** as shown in at least FIGS. **10-11B**. The mounting surface **92** may face the tone board **30**. The spacer **94** may be interposed between the striker **18** and the tone board **30**. The fastener **96** may extend through a fastener aperture **120** of the tone board **30** and into the striker **18** to provide a connection there between. In some arrangements, the mounting surface is in direct contact with the tone board **30**.

The striker **18** may have any desired shape, size and material composition. The striker **18** is shown in the figures having a pyramid-type structure with a striker surface **90** that is substantially smaller than the mounting surface **92**. The striker **18** may transfer vibrations generated during contact with the friction plate **16** into the tone board **30**, wherein the tone board **30** generates additional sound in the game call **10**. In one example, striker **18** comprises a wood material. Other materials are possible including, for example, styrene and carbon. Further, additional shapes and sizes are possible for striker **18**. The shape and size of striker

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18 may be limited based on, for example, the size of housing **12** and materials of the striker **18** and friction member **80**.

The first biasing member **20** may be a compression spring. Alternatively, first biasing member **20** may be an extension spring having one end fixed to the push rod **14** and an opposite end fixed to the housing. Other types of biasing members are possible including, for example, leaf springs and resilient materials such as rubber or foam that apply a biasing force when compressed or deformed.

The second biasing member **22** may be constructed to apply a rotation force to the friction plate **16**. The second biasing member **22** may be interposed between the locking sleeve **26** and the first stop surface **72** of the push rod **14**. The second biasing member **22** may include a first end **100** that is connected to the friction plate **16** (e.g., inserted into the first biasing member attachment aperture **86**). The second biasing member **22** may include a second end **102** that is connected to the tone adjustment member **28**. The second end **102** may extend into, for example, a second bias member attachment aperture **118** of the tone adjustment member **28** (see FIG. **11A**). With this arrangement of the second biasing member **22**, rotation of the tone adjustment member **28** increases tension in the second biasing member **22** thereby adjusting a rotation force applied by the second biasing member **22** to the friction plate **16**. Increasing tension in the second biasing member **22** increases a rotation force applied to the friction plate **16** that rotates the friction plate **16** into contact with the striker **18** such that greater friction exists between the friction plate **16** and striker **18**. The amount of friction force between the friction plate **16** and striker **18** influences the tone and other characteristics of the sound generated by the game call **10** as the push rod **14** is advanced axially relative to housing **12**.

The handle **24** may be mounted to the push rod **14**. The handle **24** may provide an interface for the user to axially operate the push rod **14**. The handle **24** may be connected to the first and second legs **62**, **64** and push rod **14**. In one example, the handle **24** includes a gripping surface **104**, which the operator contacts to move the push rod **14**. The handle **24** may also include a pair of connection recesses **106** into which the handle attachment features **70** of the first and second legs **62**, **64** extend for connection of the handle **24** to the push rod **14**. The handle **24** may further include a retention recess **108** that receives a portion of the tone adjustment member **28** to hold the tone adjustment member **28** in a desired rotated position relative to the first leg **62**. The retention recess **108** may be arranged coaxially with the connection recess **106** into which the first leg **62** extends. The retention recess **108** may include a plurality of protrusions or recesses that limit rotation of the tone adjustment member **28** when the tone adjustment member **28** is inserted therein.

In one example, the tone adjustment member **28** includes distal and proximal ends **112**, **114** and a positioning member **116**. The second end **102** of the second biasing member **22** is connected to the distal end **112** (see FIG. **11A**). The second end **102** may extend through a second bias member attachment aperture **118** formed in the tone adjustment member **116** as shown in FIG. **11A**. The proximal end **114** may include a plurality of recesses or protrusions that mate with cooperative features within the retention recess **108** to restrict rotation of the tone adjustment member **28** relative to the handle **24**. The tone adjustment member **28** may be moved axially out of the retention recess **108** so that the tone adjustment member **28** may be rotated to adjust tension in the second biasing member **22**. When the desired amount of tension is achieved in the second biasing member **22**, the

tone adjustment member **28** may be retracted axially into the retention recess **108** to fix the rotated position of the tone adjustment member **28** relative to handle **24** and the push rod **14**. The positioning member **116** may be used by the operator to help rotate the tone adjustment member **28** relative to the first leg **62**.

The locking sleeve **26** may include a locking protrusion **110** that extends radially outward. The locking sleeve **26** may further include a proximal end **109** arranged adjacent to the handle **24**, and a distal end surface **111**. The distal end surface **111** may include a portion of the locking protrusion **110**.

When the locking sleeve **26** is in an unlocked position as shown in FIG. **12A**, the locking sleeve **26** is able to move with the push rod **14** in an axial direction through the second rod opening **52**. The locking sleeve **26** is restricted from rotating into the locked position when the locking sleeve **26** is positioned within the second rod opening **52**. The push rod **14** may be retracted as shown in FIG. **12B** to position the locking protrusion **110** out of the second rod opening **52**. The distal end surface **111** of the locking protrusion **110** may then be retracted into the lock recess **58** upon rotating the locking sleeve **26** as shown in a comparison of FIGS. **12A** and **12B**.

When the locking protrusion **110** is positioned within the lock recess **58**, the push rod **14** is restricted from moving axially in a forward direction relative to the housing **12**, thereby fixing an axial position of the friction plate **16** in a forward direction relative to striker **18**. Typically, the forward stop surface **66** of the support portion **60** of the push rod **14** is moved into contact with the front end **36** of housing **12** while the locking sleeve **26** is rotated into the locked position shown in FIG. **12B** thereby also preventing axial movement of the push rod **14** in the retracted direction relative to housing **12**.

This arrangement of the locking sleeve **26** when in the locked position along with the other features of game call **10** may significantly reduce the chance of inadvertently generating sound with the game call **10** while the game call **10** is in a locked state. Typically, the operator is required to actively rotate locking sleeve **26** in order to move the game call **10** into an unlocked state in which the push rod **14** is movable axially relative to housing **12**.

In at least some arrangements, the game call **10** is configured such that the operator is required to proactively retract the push rod **14** from its rest position shown in FIGS. **1** and **12A** in order to operate the locking sleeve **26** into a locked position. In other arrangements, the locking sleeve **26** is operable into a locked position while the push rod **14** is in the rest position of FIGS. **1** and **12A**. The game call **10** may include additional biasing members that help maintain the push rod into a rest position or other position in which the locking sleeve **26** is operable into a locked position.

One method of operating the game call **10** disclosed herein is to rest the game call **10** upon a support surface with the support members **53** of the housing **12** resting upon the support surface. The operator may operate the game call **10** with a single hand by placing the operator's hand along the top surface **40**, grasping opposing sides of the housing **12** with the thumb and at least one of the ring and pinkie fingers, and extending at least one of the index and middle fingers into contact with the handle **24**. The operator may then use one of the index and middle finger to axially move the push rod **14** into an advanced position relative to the housing **12** to create sound by sliding contact between the friction plate **16** and striker **18**. The operator may release the handle **24**

and the first biasing member **20** moves the push rod **14** from the advanced position shown in FIG. **6** to the rest position shown in FIG. **1**.

The operator may adjust the tone quality of the sound generated by game call **10** by holding the handle **24** with one hand and moving the tone adjustment member **28** axially away from the handle **24** as shown in FIG. **12A**. The operator may then rotate the tone adjustment member **28** in either the clockwise or counterclockwise direction as desired to change the tension in second biasing member **22**, thereby adjusting a rotation force applied to the friction plate **16** to alter a friction interface between the friction plate **16** and striker **18**. The operator may then return the tone adjustment member **28** into contact with the handle **24** (i.e., insert the proximal end **114** into the retention recess **108**).

The operator may lock the push rod **14** relative to the housing **12** by first retracting the handle **24** from the rest position shown in FIGS. **1** and **12A** to the retracted position shown in FIG. **12B**. While holding the handle **24** in the retracted position with one hand, the operator uses an opposing hand to rotate the locking sleeve **26** into the locked position shown in FIG. **12B**. Alternatively, the operator may grasp the locking sleeve **26** and apply an axial force in a retraction direction while concurrently rotating the locking sleeve **26** between locked and unlocked positions. The game call **10** typically retains the locked position shown in FIG. **12B** until the operator intentionally rotates the locking sleeve **26** back into the unlocked position shown in FIG. **12A** so that the handle **24** may return to the rest position shown in FIG. **12A**.

The arrangement of FIGS. **1-12B** makes possible use of the game call **10** to generate sound using one hand operation. The game call **10** may be operated to adjust a tone generated by the game call **10** or to adjust the game call **10** into a locked position using one or two hands.

Unless otherwise noted, the terms "a" or "an", as used in the specification and claims, are to be construed as meaning "at least one of." In addition, for ease of use, the words "including" and "having", as used in the specification and claims, are interchangeable with and have the same meaning as the word "comprising."

What is claimed is:

1. A game call, comprising:

- a push rod having distal and proximal end portions and a longitudinal axis;
- a friction plate mounted to the push rod;
- a striker;
- a first biasing member configured to bias the push rod in a proximal direction;
- a second biasing member configured to rotate the friction plate into contact with the striker;
- a locking sleeve, the push rod being inserted into the locking sleeve, the locking sleeve being configured to fix an axial position of the friction plate relative to the striker along the longitudinal axis of the push rod.

2. The game call of claim 1, wherein tension in the second biasing member is adjustable to alter a rotational force applied to rotate the friction plate.

3. The game call of claim 1, wherein the push rod includes first and second legs, the friction plate and second biasing member being mounted to the first leg, and the locking sleeve being mounted to the second leg.

4. The game call of claim 1, wherein the first biasing member is positioned at the distal end portion of the push rod, and the locking sleeve is positioned at the proximal end portion of the push rod.

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5. The game call of claim 1, further comprising a tone board, the striker being mounted to the tone board.

6. The game call of claim 1, further comprising a housing, the striker being fixed relative to the housing, and the push rod and friction plate being movable relative to the housing.

7. The game call of claim 1, wherein the locking sleeve rotates between a locked position and an unlocked position.

8. The game call of claim 1, further comprising a tone adjustment member connected to the second biasing member and rotatable to adjust tension in the second biasing member.

9. A method of operating a game call, comprising:

providing a housing, a push rod, a friction plate, a striker, and a locking sleeve, at least one of the friction plate and striker being connected to the push rod, the push rod being inserted into the locking sleeve;

moving the push rod axially relative to the housing to move the friction plate and striker into sliding contact with each other to generate sound;

operating the locking sleeve from an unlocked position to a locked position to fix a longitudinal position of the push rod relative to the housing to fix a position of the striker relative to the housing to limit generation of sound.

10. The method of claim 9, wherein the striker is mounted to the housing and the friction plate is mounted to the push rod, the friction plate being movable relative to the striker.

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11. The method of claim 9, further comprising a biasing member configured to rotate the friction plate relative to the push rod and into contact with the striker.

12. The method of claim 9, wherein the push rod includes first and second legs, the friction plate being mounted to the first leg and the locking sleeve being mounted to the second leg.

13. The method of claim 9, further comprising biasing the push rod in a first direction and moving the push rod axially in a second direction, which is opposite to the first direction, to move the friction plate and striker into sliding contact with each other to generate sound.

14. A game call, comprising:

a push rod having distal and proximal end portions;

a friction plate mounted to the push rod;

a striker;

a first biasing member configured to bias the push rod in a proximal direction;

a second biasing member configured to rotate the friction plate into contact with the striker;

a locking sleeve connected to the push rod and configured to fix an axial position of the friction plate relative to the striker;

wherein the push rod includes first and second legs, the friction plate and second biasing member being mounted to the first leg, and the locking sleeve being mounted to the second leg.

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